

What is claimed is:

1. A data transfer controlling method in a radio system which transmits and receives data in an acknowledgement mode, the method comprising
5 the steps of:

transmitting window size control information from a receiver to a transmitter by a state of a receiving buffer; and

varying a transmitting window size by the transmitter according to the transmitted window size control information.

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2. The method of claim 1, wherein the transmitter is a network and the receiver is a terminal.

3. The method of claim 1, wherein the window size control
15 information is contained in status information thus to be transmitted.

4. The method of claim 1, wherein the window size control information is a window size super-field (SUFI).

20 5. The method of claim 3, wherein the status information further includes an ACK SUFI.

6. The method of claim 1, wherein the receiver adjusts a receiving window size to be the same as the transmitting window size.

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7. The method of claim 1, wherein the window size control information includes window size downward setting information if a receiving buffer is in an overflow state.

5 8. The method of claim 7, wherein the downward set window size is 1.

9. The method of claim 1, wherein the window size control information includes window size upward setting information if a receiving buffer is
10 not in an overflow state.

10. The method of claim 9, wherein the upward setting level is up to an upper limit.

15 11. A data transfer controlling method in a radio system which controls a flow of a radio link and includes an entity operated in an acknowledgement mode, wherein window size update information is transmitted from a receiving entity to a transmitting entity based on a processing speed of a receiving buffer.:

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12. The method of claim 11, wherein the entity is a radio link control (RLC).

13. The method of claim 11, wherein the receiving entity adjusts a
25 receiving window size to be the same as a transmitting window size.

14. The method of claim 11, wherein the window size update information is transmitted through status information.
15. The method of claim 11, wherein the window size update
5 information is a window size super-field (SUFI).
16. The method of claim 14, wherein the status information includes an ACK SUFI.
- 10 17. The method of claim 11, wherein the receiving entity determines a change of a window size according to a state of a receiving buffer.
18. The method of claim 17, wherein the receiving entity adjusts a window size to be downward set in case that data more than a certain level remain
15 on the receiving buffer.
19. The method of claim 18, wherein the downward set window size is 1.
- 20 20. The method of claim 17, wherein the receiving entity adjusts a window size to be upward set in case that data more than a certain level do not remain on the receiving buffer.
21. The method of claim 20, wherein the upward setting level is up to
25 an upper limit.

22. A data transfer controlling method in a radio data transfer of a mobile communication system, the method comprising the steps of:
- receiving a protocol data unit (PDU) from a transmitting RLC;
 - checking a state of a stored receiving buffer by a receiving PDU;
 - 5 transmitting window size control information according to a state of a receiving buffer to the transmitting RLC; and
 - varying a transmitting window size according to the window size control information by the transmitting RLC and thus transmitting PDUs.
- 10 23. The method of claim 22, wherein the receiving RLC adjusts a receiving window size to be the same as the transmitting window size.
24. The method of claim 22, wherein the window size control information includes window size downward setting information if the receiving
- 15 buffer is in an overflow state.
25. The method of claim 24, wherein the downward set window size is
- 1
- 20 26. The method of claim 22, wherein the window size control information is a window size SUFI.
27. The method of claim 22, wherein the window size control information is transmitted through status information.

28. The method of claim 27, wherein the status information is an ACK signal.

29. The method of claim 28, wherein the ACK signal includes an ACK
5 SUFI.

30. The method of claim 22, wherein the window size control information includes window size upward setting information if the receiving buffer is not in an overflow state.

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31. The method of claim 30, wherein the upward setting level is up to an upper limit.